

Serial Number: 10/040,803

CRF Processing Date: 4/30/2002
 Edited by: [Signature]
 Verified by: [Signature] (STIC staff)

ENTERED

1652

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APR 03 2002

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☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐ Edited a format error in the Current Application Data section, specifically:

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included:

☐ Deleted extra, invalid, headings used by an applicant, specifically:

☒ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as

☐ Inserted mandatory headings, specifically:

☐ Corrected an obvious error in the response, specifically:

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically:

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected:

☐ Other:



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/040,803

DATE: 01/30/2002

TIME: 20:34:50

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01302002\J040803.raw

2 <110> APPLICANT: Andrade-Gordon, Patricia
 3 Darrow, Andrew L.
 4 Qi, Jenson
 6 <120> TITLE OF INVENTION: DNA encoding human serine protease C-E
 8 <130> FILE REFERENCE: ORT-1030
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/040,803
 C--> 11 <141> CURRENT FILING DATE: 2002-01-07
 13 <160> NUMBER OF SEQ ID NOS: 11
 15 <170> SOFTWARE: PatentIn Ver. 2.0
 17 <210> SEQ ID NO: 1
 18 <211> LENGTH: 1430
 19 <212> TYPE: DNA
 20 <213> ORGANISM: Homo sapiens
 22 <400> SEQUENCE: 1

23	cgttccgcct	cccaggataa	aacctggggc	gacctgcagg	gaacctacac	accctgaccc	60
24	gcatcgccct	gggtctctcg	agcctgctgc	ctgctcccc	gccccaccag	ccatggtggt	120
25	ttctggagcg	ccccagccc	tgggtggggg	ctgtctcggc	accttcaact	ccctgctgct	180
26	gctggcgctg	acagccatcc	tcaatgcggc	caggatacct	gttccccag	cctgtgggaa	240
27	gccccagcag	ctgaaccggg	ttgtggcg	cgaggacagc	actgacagcg	agtggccctg	300
28	gacgtgagc	atccagaaga	atgggaccca	ccactgcgca	ggttctctgc	tcaccagcog	360
29	ctgggtgatc	actgctgccc	actgtttcaa	ggacaacctg	aacaaacct	acctgtttct	420
30	tgtgctgctg	ggggcctggc	agctggggaa	ccctggctct	cggtcccaga	aggtgggtgt	480
31	tgcctgggtg	gagccccacc	ctgtgtattc	ctggaaggaa	ggtgcctgtg	cagacattgc	540
32	cctggtgctg	ctcgagcgct	ccatacagtt	ctcagagcgg	gtcctgccc	tctgcctacc	600
33	tgatgcctct	atccacctcc	ctccaaacac	ccactgctgg	atctcaggct	gggggagcat	660
34	ccaagatgga	gttcccttgc	cccaccctca	gacctgcag	aagctgaagg	ttcctatcat	720
35	cgactcggaa	gtctgcagcc	atctgtactg	gcggggagca	ggacagggac	ccatcactga	780
36	ggacatgctg	tgtgccggt	acttggaggg	ggagcgggat	gcttgtctgg	gcgactccgg	840
37	gggccccctc	atgtgccagg	tggacggcgc	ctggctgctg	gcgggcatca	tcagctgggg	900
38	cgagggtgtg	gccgagcgca	acaggcccg	ggtctacatc	agcctctctg	cgcaccgctc	960
39	ctgggtggag	aagatcgtgc	aaggggtgca	gctccgcggg	cgcgctcagg	ggggtggggc	1020
40	cctcagggca	ccgagccagg	gctctggggc	cgccgcgcgc	tcctagggcg	cagcgggacg	1080
41	cggggctcgg	atctgaaaag	cgccagatc	cagatctgga	tctggatctg	cggcggcctc	1140
42	ggcggtttc	ccccgcgta	aataggctca	tctacctcta	cctctggggg	cccggacggc	1200
43	tgctgcggaa	aggaaacccc	ctccccgacc	cgcccgacgg	cctcaggccc	cgcctccaag	1260
44	gcatcaggcc	ccgcccacg	gcctcatgtc	cccgccccca	cgacttccgg	ccccgcccc	1320
45	gggccccagc	gcttttgtgt	atataaatgt	taatgatttt	tataggtatt	tgtaaccctg	1380
46	cccacatatc	ttattttattc	ctccaatttc	aataaattat	ttattctcca		1430

48 <210> SEQ ID NO: 2
 49 <211> LENGTH: 1166
 50 <212> TYPE: DNA
 51 <213> ORGANISM: Artificial Sequence
 53 <220> FEATURE:

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Output Set: N:\CRF3\01302002\J040803.raw

54 <223> OTHER INFORMATION: Description of Artificial Sequence: C-E catalytic
 55 domain in a zymogen activated construct

57 <400> SEQUENCE: 2

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58 gaattcacca ccatggacag caaagggttcg tcgcagaaat cccgcctgct cctgctgctg 60
59 gtggtgtcaa atctactctt gtgccagggg gtggtctccg actacaagga cgacgacgac 120
60 gtggacgcgg ccgctcttgc tgcccccttt gatgatgatg acaagatcgt tgggggctat 180
61 gctctagagg acagcgagtg gccctggatc gtgagcatcc agaagaatgg gaccaccac 240
62 tgcgcagggtt ctctgctcac cagccgctgg gtgatcactg ctgccactg tttcaaggac 300
63 aacctgaaca aaccatacct gttctctgtg ctgctggggg cctggcagct ggggaaccct 360
64 ggctctcggg cccagaaggt ggggtgttgc tgggtggagc cccaccctgt gtattcctgg 420
65 aaggaaggtg cctgtgcaga cattgccctg gtgcgtctcg agcgtccat acagttctca 480
66 gagcgggtcc tgcccatctg cctacctgat gcctctatcc acctccctcc aaacacccac 540
67 tgctggatct caggctgggg gagcatccaa gatggagttc ccttgcccca ccctcagacc 600
68 ctgcagaagc tgaaggttcc tatcatcgac tcggaagtct gcagccatct gtactggcgg 660
69 ggagcaggac agggacccat cactgaggac atgctgtgtg ccggctactt ggagggggag 720
70 cgggatgctt gtctgggcga ctccgggggc cccctcatgt gccaggtgga cggcgctgg 780
71 ctgctggccg gcatcatcag ctggggcgag ggctgtgccg agcgcaacag gcccggggtc 840
72 tacatcagcc tctctgcga ccgctcctgg gtggagaaga tcgtgcaagg ggtgcagctc 900
73 cgcgggcgcg ctacgggggg tggggccctc agggcaccga gccagggctc tggggccgcc 960
74 gcgcgtcct ctagacatca ccatcaccat cactagcggc cgcttccctt tagtgagggg 1020
75 taatgcttcg agcagacatg ataagataca ttgatgagtt tggacaaacc acaactagaa 1080
76 tgcagtga aaatgcttt atttgtaaaa tttgtgatgc tattgcttta tttgtaacca 1140
77 ttataagctg caataaaca gttgac 1166

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79 <210> SEQ ID NO: 3

80 <211> LENGTH: 22

81 <212> TYPE: DNA

82 <213> ORGANISM: Artificial Sequence

84 <220> FEATURE:

85 <223> OTHER INFORMATION: Description of Artificial Sequence: primer

86 oligonucleotide

88 <400> SEQUENCE: 3

```

89 ggataaaacc tggggcgacc tg 22

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91 <210> SEQ ID NO: 4

92 <211> LENGTH: 24

93 <212> TYPE: DNA

94 <213> ORGANISM: Artificial Sequence

96 <220> FEATURE:

97 <223> OTHER INFORMATION: Description of Artificial Sequence: primer

98 oligonucleotide

100 <400> SEQUENCE: 4

```

101 tccgggcccc cagaggtaga tgag 24

```

103 <210> SEQ ID NO: 5

104 <211> LENGTH: 20

105 <212> TYPE: DNA

106 <213> ORGANISM: Artificial Sequence

108 <220> FEATURE:

109 <223> OTHER INFORMATION: Description of Artificial Sequence: primer

110 oligonucleotide

112 <400> SEQUENCE: 5

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113 ctgcagaagc tgaaggttcc                                20
115 <210> SEQ ID NO: 6
116 <211> LENGTH: 20
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence
120 <220> FEATURE:
121 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
122     oligonucleotide
124 <400> SEQUENCE: 6
125 cagagaggct gatgtagacc                                20
127 <210> SEQ ID NO: 7
128 <211> LENGTH: 317
129 <212> TYPE: PRT
130 <213> ORGANISM: Homo sapiens
132 <400> SEQUENCE: 7
133 Met Val Val Ser Gly Ala Pro Pro Ala Leu Gly Gly Gly Cys Leu Gly
134   1           5           10           15
136 Thr Phe Thr Ser Leu Leu Leu Leu Ala Ser Thr Ala Ile Leu Asn Ala
137           20           25           30
139 Ala Arg Ile Pro Val Pro Pro Ala Cys Gly Lys Pro Gln Gln Leu Asn
140           35           40           45
142 Arg Val Val Gly Gly Glu Asp Ser Thr Asp Ser Glu Trp Pro Trp Ile
143           50           55           60
145 Val Ser Ile Gln Lys Asn Gly Thr His His Cys Ala Gly Ser Leu Leu
146           65           70           75           80
148 Thr Ser Arg Trp Val Ile Thr Ala Ala His Cys Phe Lys Asp Asn Leu
149           85           90           95
151 Asn Lys Pro Tyr Leu Phe Ser Val Leu Leu Gly Ala Trp Gln Leu Gly
152           100          105          110
154 Asn Pro Gly Ser Arg Ser Gln Lys Val Gly Val Ala Trp Val Glu Pro
155           115          120          125
157 His Pro Val Tyr Ser Trp Lys Glu Gly Ala Cys Ala Asp Ile Ala Leu
158           130          135          140
160 Val Arg Leu Glu Arg Ser Ile Gln Phe Ser Glu Arg Val Leu Pro Ile
161 145           150          155          160
163 Cys Leu Pro Asp Ala Ser Ile His Leu Pro Pro Asn Thr His Cys Trp
164           165          170          175
166 Ile Ser Gly Trp Gly Ser Ile Gln Asp Gly Val Pro Leu Pro His Pro
167           180          185          190
169 Gln Thr Leu Gln Lys Leu Lys Val Pro Ile Ile Asp Ser Glu Val Cys
170           195          200          205
172 Ser His Leu Tyr Trp Arg Gly Ala Gly Gln Gly Pro Ile Thr Glu Asp
173           210          215          220
175 Met Leu Cys Ala Gly Tyr Leu Glu Gly Glu Arg Asp Ala Cys Leu Gly
176 225           230          235          240
178 Asp Ser Gly Gly Pro Leu Met Cys Gln Val Asp Gly Ala Trp Leu Leu
179           245          250          255
181 Ala Gly Ile Ile Ser Trp Gly Glu Gly Cys Ala Glu Arg Asn Arg Pro
182           260          265          270

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```

184 Gly Val Tyr Ile Ser Leu Ser Ala His Arg Ser Trp Val Glu Lys Ile
185           275           280           285
187 Val Gln Gly Val Gln Leu Arg Gly Arg Ala Gln Gly Gly Gly Ala Leu
188       290           295           300
190 Arg Ala Pro Ser Gln Gly Ser Gly Ala Ala Ala Arg Ser
191 305           310           315
194 <210> SEQ ID NO: 8
195 <211> LENGTH: 327
196 <212> TYPE: PRT
197 <213> ORGANISM: Artificial Sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: Description of Artificial Sequence: C-E catalytic
201     domain fusion protien
203 <400> SEQUENCE: 8
204 Met Asp Ser Lys Gly Ser Ser Gln Lys Ser Arg Leu Leu Leu Leu Leu
205 1           5           10           15
207 Val Val Ser Asn Leu Leu Leu Cys Gln Gly Val Val Ser Asp Tyr Lys
208       20           25           30
210 Asp Asp Asp Asp Val Asp Ala Ala Leu Ala Ala Pro Phe Asp Asp
211       35           40           45
213 Asp Asp Lys Ile Val Gly Gly Tyr Ala Leu Glu Asp Ser Glu Trp Pro
214       50           55           60
216 Trp Ile Val Ser Ile Gln Lys Asn Gly Thr His His Cys Ala Gly Ser
217 65           70           75           80
219 Leu Leu Thr Ser Arg Trp Val Ile Thr Ala Ala His Cys Phe Lys Asp
220       85           90           95
222 Asn Leu Asn Lys Pro Tyr Leu Phe Ser Val Leu Leu Gly Ala Trp Gln
223       100          105          110
225 Leu Gly Asn Pro Gly Ser Arg Ser Gln Lys Val Gly Val Ala Trp Val
226       115          120          125
228 Glu Pro His Pro Val Tyr Ser Trp Lys Glu Gly Ala Cys Ala Asp Ile
229       130          135          140
231 Ala Leu Val Arg Leu Glu Arg Ser Ile Gln Phe Ser Glu Arg Val Leu
232 145          150          155          160
234 Pro Ile Cys Leu Pro Asp Ala Ser Ile His Leu Pro Pro Asn Thr His
235       165          170          175
237 Cys Trp Ile Ser Gly Trp Gly Ser Ile Gln Asp Gly Val Pro Leu Pro
238       180          185          190
240 His Pro Gln Thr Leu Gln Lys Leu Lys Val Pro Ile Ile Asp Ser Glu
241       195          200          205
243 Val Cys Ser His Leu Tyr Trp Arg Gly Ala Gly Gln Gly Pro Ile Thr
244       210          215          220
246 Glu Asp Met Leu Cys Ala Gly Tyr Leu Glu Gly Glu Arg Asp Ala Cys
247 225          230          235          240
249 Leu Gly Asp Ser Gly Gly Pro Leu Met Cys Gln Val Asp Gly Ala Trp
250       245          250          255
252 Leu Leu Ala Gly Ile Ile Ser Trp Gly Glu Gly Cys Ala Glu Arg Asn
253       260          265          270
255 Arg Pro Gly Val Tyr Ile Ser Leu Ser Ala His Arg Ser Trp Val Glu

```

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Input Set : A:\PTO.AMC.txt

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```

256          275          280          285
258 Lys Ile Val Gln Gly Val Gln Leu Arg Gly Arg Ala Gln Gly Gly Gly
259          290          295          300
261 Ala Leu Arg Ala Pro Ser Gln Gly Ser Gly Ala Ala Ala Arg Ser Ser
262 305          310          315          320
264 Arg His His His His His His
265          325
268 <210> SEQ ID NO: 9
269 <211> LENGTH: 40
270 <212> TYPE: DNA
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: Description of Artificial Sequence: nested primer
275     oligonucleotide
277 <400> SEQUENCE: 9
278 ggacatgctg tgtgccggct acttgagggg ggagcgggat          40
280 <210> SEQ ID NO: 10
281 <211> LENGTH: 33
282 <212> TYPE: DNA
283 <213> ORGANISM: Artificial Sequence
285 <220> FEATURE:
286 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
287     oligonucleotide
289 <400> SEQUENCE: 10
290 aggatctaga ggacagcgag tggccctgga tcg          33
292 <210> SEQ ID NO: 11
293 <211> LENGTH: 33
294 <212> TYPE: DNA
295 <213> ORGANISM: Artificial Sequence
297 <220> FEATURE:
298 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
299     oligonucleotide
301 <400> SEQUENCE: 11
303 gtgctctaga ggagcgcgcg gcggccccag agc          33

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/040,803

DATE: 01/30/2002

TIME: 20:34:51

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01302002\J040803.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date